

July 30, 2003

MAINE PUBLIC UTILITIES COMMISSION  
Inquiry into the Development of Power Quality  
Criteria for Use in T&D Utility Alternative Rate  
Plans (ARPs)

ORDER APPROVING  
POWER QUALITY TASK  
FORCE REPORT AND  
CONCLUDING INQUIRY

WELCH, Chairman; DIAMOND and REISHUS, Commissioners<sup>1</sup>

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## **I. SUMMARY**

In this Order we adopt the findings and recommendations contained in the Power Quality Task Force (PQTF) Report of May 8, 2003 and thus close out this inquiry into the development of power quality criteria for use in transmission and distribution (T&D) utility Alternative Rate Plans (ARPs).

## **II. BACKGROUND**

On June 11, 2002, the Commission issued an Order Approving Stipulation in *Bangor Hydro-Electric Company, Request for Approval of Alternative Rate Plan*, Docket No. 2001-410, which approved an ARP for Bangor Hydro-Electric Company (BHE). BHE's ARP includes a Service Quality Index (SQI) which contains two separate power reliability criteria. The parties to the ARP Stipulation were not able to agree upon a suitable indicator to measure power quality, but agreed to convene a statewide task force of interested stakeholders, including the parties, the Commission Staff, Central Maine Power Company (CMP) and Maine Public Service Company (MPS), to investigate alternatives and, where appropriate, recommend a new indicator(s) for measuring power quality service performance. The parties to the Stipulation further agreed to investigate, as part of the state wide task force process, whether a Momentary Average Interruption Frequency Index (MAIFI) should be included as an SQI indicator.

On August 20, 2002, we opened this inquiry to provide a vehicle for the power quality task force contemplated in the Stipulation in Docket No. 2001-410 to conduct its business and to provide recommendations to the Commission. Pursuant to the Commission's notice, a Power Quality Task Force (PQTF), comprised of representatives from BHE, CMP, MPS, the Office of the Public Advocate (OPA) and the

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<sup>1</sup> Commissioner Reishus did not participate in this decision since she joined the Commission after deliberations on this matter. Former Commissioner Nugent voted with the majority in this case but left the Commission before the issuance of this written decision.

Commission Staff, was convened. Since that time, the PQTF has met periodically and has exchanged information and ideas on the development of an ARP power quality metric.

### III. SUMMARY OF THE PQTF REPORT

On May 8, 2003, the PQTF filed a unanimous report with the Commission. As described in the Report, based on discussions at the PQTF collaborative meetings and the data provided by each utility, the PQTF reached the following conclusions:

- The value of MAIFI or MAIFI<sub>E</sub> as a metric to evaluate power quality is unknown. To assess its value, a comparison should be made between the number of customer complaints filed on momentary outages, the number of recloser operations for the device associated with each of those customers, and also with the number of sustained interruptions on the particular circuit.
- It would be difficult at this time to establish a common standard for MAIFI or MAIFI<sub>E</sub> between the three utilities due to the differences in design of the three distribution systems.
- More information is needed to establish a MAIFI or MAIFI<sub>E</sub> metric, if one were to be adopted as a measure of power quality in an ARP.

In light of the above conclusions, the PQTF recommended that a MAIFI or MAIFI<sub>E</sub> standard not be established at this time. Rather, the PQTF recommends that each utility collect data regarding recloser operations for a two-year period. The data could then be used to determine if MAIFI, MAIFI<sub>E</sub>, or some other metric should be adopted to assess the quality of power provided by CMP, BHE and MPS. The data will also be used to determine if a correlation exists between customer satisfaction and momentary interruptions. If the decision is made to adopt such a metric, the metric could be incorporated into BHE's ARPs during the plan's mid-period review and as part of CMP's next ARP. MPS does not currently have an alternative rate plan, however, if such a plan is established, the metric could be considered for inclusion.

The PQTF Report further recommended that each utility file a report with the Maine Public Utility Commission by March 15<sup>th</sup> of each year that includes the following information for the previous calendar year:

- (a) the total number of recloser operations (including distribution reclosing breakers) by circuit;
- (b) the total number of recloser operations (including distribution reclosing breakers) by device identified to each circuit;

- (c) the number of recloser operations (including distribution reclosing breakers) per circuit mile by circuit and by distribution system;
- (d) the number of customer complaints for momentary interruptions by circuit;
- (e) the number of customer complaints for momentary interruptions by device identified to each circuit; and
- (f) the number of customer complaints for momentary interruptions per circuit mile.
- (g) For MPS the number of momentary events and MAIFI<sub>E</sub> as reported by the Company's Sentry system by circuit, by device, and by distribution system.

After the first year's reporting, the report will identify areas where there has been a significant increase in the number of recloser operations or customer complaints, an evaluation of the cause of the increase and an action plan for removing the root causes of any problems identified. BHE and CMP shall incorporate this report into their annual ARP filings. CMP and BHE shall also incorporate the reported information as part of their analysis of the identification of their "ten worst circuits," provided as part of the ARP annual reliability report.

#### IV. DECISION

We find that the PQTFs findings and conclusions appropriately balance the interests of the utility's shareholders and ratepayers by requiring the utility to collect and submit data to us for our review and analysis prior to committing to an additional SQI metric to measure T&D utility performance. We, thus, conclude that the report's findings and recommendations are reasonable and consistent with the public interest and thus serve as an appropriate framework for going forward.

Accordingly, we

#### O R D E R

1. That the Power Quality Task Force Report of May 8, 2003 ( a copy of which is attached hereto) is approved and is incorporated by reference herein;
2. That Central Maine Power Company, Bangor Hydro-Electric Company and Maine Public Service Company shall file the data and reports as agreed to in the Power Quality Task Force Report; and,

3. That this inquiry is hereby closed.

Dated at Augusta, Maine, this 30<sup>th</sup> day of July, 2003.

BY ORDER OF THE COMMISSION

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Dennis L. Keschl  
Administrative Director

COMMISSIONERS VOTING FOR:      Welch  
   Diamond  
   Reishus

## NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

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